ECHO REST Management Guide

> ECHO has been replaced by the **Common Metadata Repository (CMR)**, a high-performance, high-quality, continuously evolving metadata system that catalogs all data and service metadata records for the EOSDIS system and will be the authoritative management system for all EOSDIS metadata.
>
> The information contained within this ECHO wiki is now archived for historical reference. Please navigate to the **CMR wiki pages**, or to the **CMR Overview page** on **Earthdata**.

Overview

The purpose of this document is to guide new and existing ECHO client developers through the process of manipulating business objects via our REST interface. It is intended to be a hands-on, step-by-step introduction to the process. Any comments or questions regarding the contents of this document should be directed to echo@echo.nasa.gov

Assumptions and Pre-requisites

This document is targeted at a technical audience and is intended to be a high-level roadmap for search and ordering implementations. While much of this material should be accessible to novice ECHO users, there are a few technologies and configurations that will prove useful to have in your tool belt to follow along with this document.

1. A working knowledge of REST concepts (http://en.wikipedia.org/wiki/Representational_state_transfer)
2. Familiarity with ECHO and the EOSDIS User Registration System (URS) (necessary for ordering/finding certain data)
3. Familiarity with the ECHO10 format at both the dataset and granule level.
4. Ability to perform basic HTTP operations (GET, PUT, POST, DELETE) via some sort of programmatic tool. This document will use curl in its examples, but there are several excellent command line (wget) and browser-based tools (REST Client for Firefox, Postman and other tools for Chrome)
5. These operations requires a registered and active URS profile (http://urs.eosdis.nasa.gov).

Multiple Possible Output Formats

Like many RESTful web services, ECHO supports exporting results in multiple formats. Whether you are more comfortable with a reference list, full metadata exports in various formats or simple json results, you will find what you are looking for via ECHO's REST web-service format extensions.

Document Conventions

REST call parameters are shown using the following format:

Route:	https://api-test.echo.nasa.gov/ <route>
Verb:	{GET, PUT, POST, DELETE}
Supported Extensions:	{.xml, .json, .echo10, .iso19115, … }
Header:	Name = Value

The following styling is used for sample xml bodies and example responses:

```
<element>

<subelement>value</subelement>

<subelement>value</subelement>

</element>
```

The following styling is used for sample command line curl invocations:

```
curl https://api-test.echo.nasa.gov
```

Managing Tokens

Managing Groups

Managing Access Control Lists

Managing ECHO Orders

Managing Services